Issue #23 of Teaching Children Mathematics

November 2011

÷

+

×

**Mathematics**

**News in**

**Teaching Math Concepts**

By Sarah Stover

As teachers, sometimes it seems rather difficult to introduce and teach concepts in a way that every type of learner can understand. There are the visual learners, auditory learners, and the tactile learners, all of which we have seen in our classrooms. In this article, we’ll look at several options math teachers have on teaching concepts in different ways, as well as students’ views on how they best learn math concepts.

We interviewed Jeff Stover, a math teacher for 25 years, on his philosophy of teaching. “Students learn in all different ways, and you have to provide for each way,” says Jeff Stover, “You can't do the same thing every day. The most effective teachers use a combination of techniques.” Stover continues to explain how he tries to incorporate different styles in the way they practice problems during class. “Some students see you do it, and they learn that way,” says Stover, “Others like to do it themselves, so it's better to introduce it and give them opportunities to work on it in class while you monitor. Some students learn better from each other, so you give them time to work with another person or group in class.” When there is a variety of teaching techniques used in a class period, the different types of learners will be able to comprehend the concepts.

“You can't do the same thing every day. The most effective teachers use a combination of techniques.”

~Jeff Stover

““

*Jeff Stover explains a homework problem on the board.*

““

For this article, we also interviewed six different students on how they best learn in their math classes. 3 of the students interviewed said that visuals and pictures help them with math problems. Another 3 of the students interviewed also said that they learn math concepts or study by doing practice problems. This suggests that math is a subject in which students learn best by doing or seeing rather than listening. This is probably because mathematics consists of a lot of processes or theorems that are then applied to math problems. Examples show students how to apply these theorems, which is why as a math teacher it is extremely important to do practice problems in class and to assign homework problems for the students to do on their own. Even the students that were interviewed mentioned how homework is helpful because it gives you a chance to ask the teacher questions. From a teacher’s point of view, Stover says, “Practice makes permanent. Homework is about practicing the skills you learn in class. Sometimes all you need to give is five problems for them to practice it enough." ■

““